

an operating arc defined by a subset of points on said sky track over said service area, said satellite operating on said operating arc.

Claim 8. (Once Amended) A satellite communications system comprising:

a service area on a surface of the earth having a predetermined minimum elevation angle from the horizon;

a ground station located within said service area;

a first satellite having a first eccentric, substantially 24-hour period geosynchronous orbit with respect to the earth having a first sky track when viewed from within said service area, said first orbit having first inclination relative to an equatorial plane of the earth;

a second satellite having a second eccentric, substantially 24-hour period geosynchronous orbit with respect to the earth having a second sky track when viewed from within said service area, said second orbit having a second inclination different from the first angle of inclination relative to an equatorial plane;

said first satellite having a first operating arc defined by a first subset of points on said sky track over said service area, said first satellite operating within the service area;

said second satellite having a second operating arc defined by a second subset of points on the said second sky track within said service area, said second satellite operating within the service area.

Claim 17. (Twice Amended) A method of providing a system of satellite orbits, the method comprising:

specifying at least one geographic service area within which satellite coverage is to be provided, said service area having a minimum elevation angle thereabove;

defining a pair of inclined eccentric, substantially 24-hour period geosynchronous satellite orbits, each satellite orbit defining the orbit, each satellite